

## **REMARKS**

In the final office action, claims 1-3, 7-9 and 11-14 were rejected, and claim 10 was objected to. Claims 1-3 and 7-14 were rejected under 35 U.S.C. 112, first paragraph, because of the reference in claim 1 to tilting the endoscope head, as opposed to bending the distal end of the endoscope, which is noted as enabled by the specification. Claim 1 also was rejected under 35 U.S.C. 112, second paragraph, because of use of the phrase “such as,” which the examiner considers to be indefinite.

In addition, claims 1-3, 7-9 and 11-14 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,398,670 to Ortiz et al. (Ortiz et al.). The examiner separately objected to claim 10 as being allowable if rewritten to overcome the rejection under 35 U.S.C. 112, second paragraph, and to include all of the limitations of the base claim and any intervening claims from which it depends.

Applicants have amended claims 1 and 10 to overcome the rejections under 35 U.S.C. 112. Applicants also have included a new claim 15, which is a version of pending claim 15 that was objected to but noted as otherwise being allowable. New independent claim 10 includes the amendments to claims 1 and 10, as well as the limitations of claims 7 and 8 which were the intervening claims with respect to claim 10. With these amendments and in view of the further remarks below, it is respectfully submitted that claims 1-3 and 7-15 are patentable and should be allowed.

Applicants wish to address the cited prior art, U.S. Patent 5,398,670 to Ortiz et al., to ensure that Applicants and the examiner have a proper understanding of the reference. Unfortunately, in rejecting claim 1, the examiner made conclusory statements concerning the presence in Ortiz et al. of certain limitations of pending claim 1, without pointing out the specific structures in Ortiz et al. that the examiner

contents correspond to the claim limitation. For instance, the examiner states, in part, at page 4 of the final office action:

and a mounting adapter 20 for attaching the endoscope head to an endoscope shaft 30 and wherein the mounting adapter is adapted to provide and/or enable all connections between conduits and/or passages formed in the endoscope shaft and the function-related units of the endoscope head (see Fig. 3), and wherein the mounting adapter consists of two concentric coincident cylinder elements having different radii which are interconnected via an adapter plate which is formed on a front side of both cylinder elements such that a cavity in the form of a circle segment is formed between the cylinder elements which segment is divided into three sections by radial ribs, wherein the three sections comprise receiving means, respectively for receiving bending elements for tilting the endoscope head relative to the endoscope shaft (see Figs. 7-8 and 11-14).

It is respectfully submitted that the examiner lumped these limitations together and attempted a global recitation to Figs. 7-8 and 11-14 because it is not possible to specifically and properly identify the individual limitations within the disclosure of Ortiz et al., because they do not exist.

Ortiz et al. discloses several embodiments of a medical instrument in the form of an exploration device for use in a lumen of a tubular body part. Summary at col. 2, lines 1-5. The instrument is constructed to be able to migrate or move through a tubular body part, such as an intestine of a patient, according to the inchworm principle, pulling a hose package along, as is shown for example in Figs. 7A-7E. Summary at col. 2, line 15 – col. 3, line 11. Consequently, according to Fig. 3, two annular fluid hoses (bladders) 26, 42 which are axially spaced apart are provided, and are filled and emptied alternately for taking turns in being supported on the tubular body wall. In this way, the distal end (section) 20 can be pushed forward and, thereafter, the proximal end can be pulled to follow, while an intermediate section 30 of the endoscope takes turns in axially expanding and contracting.

The distal end of the device can take several forms, as are shown in different embodiments: a first embodiment in Figs. 1-4 and 7A-7E, col. 4, line 51 – col.8, line 40; a second embodiment in Figs. 8 and 9, col. 8, line 41 – col. 10, line 10; a third embodiment in Fig. 11, col. 10, lines 11-26; a fourth embodiment in Fig. 12, col. 10, lines 27-56; and a fifth embodiment in Figs. 13 and 14, col. 10, line 57 – col. 11, line 18. However, despite the examiner's catchall citation to Figs. 7-8 and 11-14, upon a closer review of Ortiz et al., it can be seen that none of the Figures depicts a device having the claimed mounting adapter that consists of two concentric coincident cylinder elements having different radii which are interconnected via an adapter plate which is formed on a front side of both cylinder elements such that a cavity in the form of a circle segment is formed between the cylinder elements which segment is divided into three sections by radial ribs, wherein the three sections comprise receiving means, respectively for receiving bending elements for bending the distal end portion of the endoscope relative to the endoscope shaft.

The distal end 20 of Ortiz et al. is composed of a first portion 22 and a second portion 24 which presumably is asserted to be similar to an endoscope head. The first portion 22 is used for receiving three shaped-memory-alloy wires 210a-210c (col. 11, lines 1-10), and is firmly connected to the second portion 24, which forms a head according to Fig. 3, and is shown in various forms in further detail in Figs. 8 to 12 (col. 4, Brief Description of the Drawings). Accordingly, the snap-on mechanism consists of three hooks engaging at undercuts of the first portion 22, respectively, regardless of the configuration of Ortiz et al. that is chosen.

Thus, an analysis of the structures of Ortiz et al. leads to the following technical situation: Ortiz et al. discloses an instrument having a head (second portion 24 of the distal end 20). There is further provided a mounting adapter (first portion 22

of the distal end 20) for establishing all connections between the head and the shaft (intermediate section 30). The first portion 22 has three receiving bores into which the distal ends of the shape-memory-alloy wires 210a-210c are inserted. All Figures of Ortiz et al. show the first portion 22 (presumably corresponding to the mounting adapter) unitarily formed of one massive solid cylinder (see for example Fig. 3, for example) into which the receiving bores and the connecting passages are incorporated.

Contrary to Ortiz et al., as set forth in amended claim 1, the mounting adapter according to the present invention is composed of two concentric coincident cylinder elements having different radii (8 and 9) which are interconnected via an adapter plate which is formed on a front side of both cylinder elements (10) such that a cavity in the form of a circle segment is formed between the cylinder elements (area in the form of a circle between 8 and 9) which segment is divided into three sections by radial ribs (12), wherein the three sections comprise receiving means (cylinders 13), respectively for receiving bending elements for bending the distal end portion of the endoscope relative to the endoscope shaft.

These particular features, which are found in combination within amended claim 1, describe the construction of a mounting adapter that is not known or suggested from Ortiz et al. In fact, while Ortiz et al. offers several alternative embodiments, none of the embodiments in Ortiz et al. discloses or teaches two concentric coincident cylinder elements having different radii that are connected via an adapter plate. Nor does Ortiz et al. disclose such two concentric coincident cylinder elements having different radii which are connected in a manner which yields a cavity in the form of a circle segment between the cylinder elements. Nor does Ortiz et al. disclose such a circle segment formed between two concentric coincident

cylinder elements that is divided into three sections by radial ribs. Nor does Ortiz et al. disclose such a circle segment formed between the two concentric coincident cylinder elements that is divided into three sections by radial ribs and that includes receiving means for receiving bending elements for bending the distal end portion of an endoscope relative to an endoscope shaft. Each of these features, individually as well as in combination, is disclosed only in Applicants' application at pages 5 and 6, and in Figures 1, 3 and 4. In light of the foregoing amendments to the claims and the remarks, it is respectfully submitted that Ortiz et al. does not anticipate or otherwise render obvious Applicants' independent claims 1 and 15, or any of the claims depending from claim 1.

The above amendments to claims 1 and 10, and the addition of new independent claim 15, are fully in keeping with the subject matter disclosed and described in the specification. Moreover, the amendments are not such as would likely necessitate another search by the Examiner. In accordance with the above amendments and remarks, Applicants request consideration and entry of the amendments, and withdrawal of the final rejections. Applicants submit that with such amendments, independent claims 1 and 15, as well as claims 2-3 and 7-14 depending from claim 1, are patentable and should be allowed. If there are any remaining issues in this application, Applicants urge the examiner to contact the undersigned attorney at the number listed below.

This response is being submitted with an RCE and the associated fee of \$810.00. Applicants have not exceeded the number of independent or total claims permitted within the standard fee and believe that no further fee is due with this response, however, the Commissioner is authorized to charge any fee deficiency due, or credit any overpayment, for the filing of this paper to deposit account number 50-2455.

Respectfully submitted,

HANLEY, FLIGHT, & ZIMMERMAN, LLC

/David M. Thimmig/  
David M. Thimmig  
Reg. No. 36,034  
Attorney for Applicants  
150 S. Wacker Drive, Suite 2100  
Chicago, Illinois 60606  
(312) 580-1020

**October 29, 2007**